

Remarks

Applicant presents claims 6 to 16 and 18 for consideration.

In addition to the cancellation of claims 1 to 5 and 17, which Applicant has previously cancelled, Applicant hereby cancels without prejudice claims 19 and 20 and reserves the right to subsequently file a continuation application utilizing the presently rejected claims.

Applicant has not modified any of claims 6 to 16 in view of the Examiner's indication that they are allowable.

With respect to claim 18, in view of Applicant's telephone conversations with the Examiner, Applicant has not amended nor cancelled claim 18 but instead respectfully traverses the Examiner's rejection in view of the following remarks.

35 USC § 103 Rejections

For the reasons that follow, Applicant respectfully disagrees with the Examiner's rejection of claim 18 under 35 USC § 103 in view of Takahashi (US 6192435 B1) in combination with Wood (US 5726506).

Claim 18 is as follows:

A multiconductor plug and socket means arrangement, said plug and socket means sharing a common axis, said plug means having a plurality of plug contacts thereon, adapted for insertion in said socket means, said socket means having a plurality of socket contacts disposed thereon corresponding to said plug contacts, comprising:

- a) a first plug contact of said plug contacts electrically coupled to a first diode, and at least one other plug contact electrically coupled to plug isolation means;
- b) a first socket contact of said socket contacts electronically coupled to a second diode, and at least one other socket contact electronically coupled to socket isolation means;

- c) the plug isolation means activated only when the second diode is detected by the full engagement of the plug and socket so as to then permit electrical current to flow to and/or from said at least one other plug contact thereon; and
- d) the socket isolation means activated only when the first diode is detected by the full engagement of the plug and socket so as to then permit electrical current to flow to and/or from said at least one other socket contact thereon.

The Examiner argues that Takahashi teaches all the elements of claim 18 except the first and second diodes. The Examiner further argues that Wood discloses the use of protective diodes, and that it would have been obvious to one of ordinary skill in the art to incorporate the protective diodes of Wood on to the power supply and load lines taught by Takahashi to result in the invention as claimed in claim 18, with the motivation being to protect the power supply of Takahashi from reverse current.

Applicant has considered the Examiner's arguments, but respectfully submits that they are moot in view of the following comments.

As the Examiner has acknowledged in the final office action, Takahashi shows a plug and socket arrangement comprising a main unit 20 (the socket side) and a peripheral unit 30 (the plug side) (see, e.g., Figure 2 of Takahashi, which is the Figure on which the Examiner has focused). Also as acknowledged by the Examiner, Figure 2 of Takahashi discloses two electronic isolation means: switch SW1 and transistor 10.

Notably, however, the switch SW1 and transistor 10 of Takahashi are both coupled to the plug side of Takahashi such that when the plug and socket sides of Takahashi are disengaged, or uncoupled, the socket side circuitry of Takahashi is not electrically coupled to either of the isolation means, switch SW1 or transistor 10. *Electrical coupling of the socket side circuitry of Takahashi to the isolation means, switch SW1 and transistor 10, occurs only when the plug*

and socket sides of Takahashi are engaged (i.e.: when the plug side is inserted into the socket side).

In contrast, Applicant presently claims

A multiconductor plug and socket means arrangement [...] comprising:

- a) a first plug contact of said plug contacts electrically coupled to a first diode, and *at least one other plug contact electrically coupled to plug isolation means;*
- b) a first socket contact of said socket contacts electronically coupled to a second diode, and *at least one other socket contact electronically coupled to socket isolation means;*
[emphasis added]

Referring now to Figures 1 and 3 of Applicant's application, Applicant highlights the socket side isolation circuit 216 that is always coupled to the socket 226, *even when the plug 212 is not inserted into the socket 226.* In the exemplary embodiment of Figure 3, the socket side isolation circuit 216 has socket isolation means in the form of digital switches 245, which are coupled to digital lines 231, 232 that form part of the I/O lines 222 that are coupled to the socket 226. Again, *the socket isolation means are coupled to the socket 226 even when the plug 212 is not inserted into the socket 226 (i.e.: the plug 212 and socket 226 are disengaged)..*

Additionally, referring now to Figures 1 and 2 of Applicant's application, Applicant highlights the plug side isolation circuit 202 that is always coupled to the plug 212, *even when the plug 212 is not inserted into the socket 226.* In the exemplary embodiment of Figure 2, the plug side isolation circuit 202 has plug isolation means in the form of digital switches 246, which are coupled to digital lines 233, 234 that form part of the I/O lines 208 that are coupled to the plug 212. Again, *the plug isolation means are coupled to the plug 212 even when the plug*

212 is not inserted into the socket 226 (i.e.: the plug 212 and socket 226 are disengaged).

Applicant therefore respectfully submits that the phrase "at least one other socket contact electronically coupled to socket isolation means" in claim 18 is properly construed to mean at least one other socket contact electronically coupled to socket isolation means, even when the plug and socket are disengaged (i.e.: uncoupled).

Furthermore, Applicant respectfully submits that the phrase "at least one other plug contact electrically coupled to plug isolation means" in claim 18 is properly construed to mean that at least one other plug contact is electrically coupled to the plug isolation means even when the plug and the socket are disengaged (i.e.: uncoupled).

Applicant does not believe claim 18 is properly construed to include an embodiment wherein plug isolation means are electrically coupled to the plug contacts only when the plug and socket means are engaged (i.e.: coupled). Claim 18 is to be construed to describe an embodiment wherein plug isolation means and its associated contacts are coupled to the plug contacts even when the plug is not coupled to the socket. Furthermore, there is no teaching in Applicant's disclosure to suggest otherwise.

Similarly, Applicant does not believe claim 18 is properly construed to include an embodiment wherein socket isolation means are electronically coupled to the socket contacts only when the plug and socket means are engaged (i.e.: coupled). Claim 18 is to be construed to describe an embodiment wherein socket isolation means and its associated contacts are coupled to the socket contacts even when the socket is not coupled to the plug. Furthermore, there is no teaching in Applicant's disclosure to suggest otherwise.

In contrast, Takahashi only discloses the presence of isolation means switch SW1 and transistor 10 on the plug side (i.e.: peripheral unit 30), which isolation

means are not coupled to the socket side (i.e.: main unit 20) when the plug and socket side are disengaged.

As there is no teaching in Takahashi that either of the isolation means should be located on the socket side such that the socket side will be coupled to isolation means even when the plug and socket are disengaged, Applicant respectfully submits that the combination of Takahashi and Wood does not result in the invention claimed in claim 18, when claim 18 is properly construed as Applicant submits.

In view of the above, Applicant submits that this application is now in condition for allowance, and a Notice thereof is respectfully requested. The Examiner is requested to contact the undersigned at the number listed below for a telephone interview if, upon consideration of this amendment, the Examiner determines any pending claims are not in condition for allowance.

The undersigned also requests the Examiner to direct all future correspondence to the address set forth below in the event the Examiner shows a different correspondence address for the attorney of record.

Respectfully submitted,



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